

ABSTRACT

In a mobile communication device, an automatic frequency control method and apparatus are described that are capable of minimizing the number of timing changes that have to be made due to frequency errors without increasing the overall frequency sensitivity of the receiver unit. A frequency control unit of the present invention is capable of detecting a magnitude and direction of a timing drift that may arise from a frequency error. The automatic frequency control unit thereafter adjusts the frequency of the receiver unit in such a way so as to reverse the direction of the timing drift before it becomes too large. In this way, the number of timing changes that have to be made is reduced.